

Application No.: 10/583,024  
Filing Date: March 22, 2007

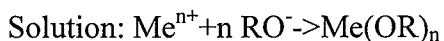
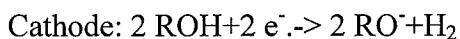
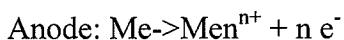
## AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0134] of the specification as set forth below:

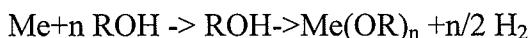
[0134] FIG. 7: illustrates a schematic representation of a generalized process layout of a preferred embodiment according to the present invention. The embodiment includes a supercritical reactor vessel with a material (5). A fluid from the fluid storage (1) is fed to the supercritical reactor vessel (5) at a controlled rate and under controlled conditions by means of the compressor (2) and a heat exchanger (3) for adjustment of fluid temperature. The compressor and heat exchanger forms the recirculation loop utilized for continuous control of the reactor conditions, particularly temperature and fluid composition. The fluid is withdrawn from the reactor through the separator (6), and recycled to the fluid storage (1). The alcohol produced in the reaction may be recollected in the separator (6) either during the reaction period, by circulating a purge stream (7) of the supercritical fluid through the fluid storage (1).

Please amend paragraph [0144] of the specification as set forth below:

[0144] FIG. 8 shows schematic diagram of an in situ production alkoxide precursor according to the present invention. The figure illustrates an electrochemical synthesis of said metal alkoxides being introduced at (4) in FIG. 7. The in-situ production may be provided by implementing using an anode (4) (11) constructed from the metal to be transformed into the alcoxide, and a standard cathode (5) (12). The electrodes are immersed immersed into the alcohol solvent (3) (10), and a suitable electric potential may be applied by means of a voltage generator (6) (13). The electrical conductivity of the alcohol solvent may be improved by addition of an organic salt or other suitable ionic species. The chemical reactions taking place may be:



in which Me denotes the metal, ROH the alcohol and Me(OR)<sub>n</sub> a metal alkoxide. The overall reaction is reduced to:



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**Please amend paragraph [00145] of the specification as follows:**

**[0145]** The formed hydrogen may be withdrawn through a vent ~~(7)~~ (14), and the remaining metal alkoxide solution may be withdrawn and introduced into said supercritical reactor through the outlet ~~(2)~~ (9). The alcohol may be replenished through ~~(1)~~ (8). Any ionic species added to modify the electrical conductivity of the solution may preferably be selected so as to be recollected with the excess alcohol, or purged out of the supercritical reactor during the pressurized state.